Career Planning and Development for Students: Building a Career in a Professional Practice Discipline

The authors would like to acknowledge Gail J. Donner and Mary M. Wheeler (Donnewheeler) for their scholarship and leadership in career planning and development for student and registered nurses.

“Never lose an opportunity of urging a practical beginning, however small, for it is wonderful how often the mustard seed germinates and roots itself”
Florence Nightingale

Nurses assume a variety of roles in complex and ever changing health care systems. Moreover, the increasing demands of current work environments require that nurses be well prepared to provide and influence quality health care services. Nurse educators, therefore, are faced with the challenge of creating curricula that prepare and socialize students to take an active role in the evolution of their individual nursing careers as well as help shape the future of the profession.

Changing professional practice environments offer students tremendous opportunities along with significant challenges. To achieve success in the current work environment students must become career resilient and self-directed. Career resilient workers are dedicated to the concept of continuous learning, are ready to adapt and grow in order to keep pace with change, assume responsibility for developing their career, and are committed to both the their own success and that of the organization in which they work (Donner & Wheeler, 2004; Waterman, Waterman, & Collard, 1994). Career resilience is congruent with the definitions of nursing practice that include autonomy, self-direction and continuous learning. Developing the skills and professional attitude necessary for career resilience is a process that students should begin in the first year of their nursing education.

Career planning and development is a dynamic process that adapts to the changes students’ experience as they build their professional knowledge, experience, and identity. Fundamental to the career planning and development process is self-discovery. The individual engages in a self-assessment process that requires ongoing examination of personal values, within the context of one’s nursing education and the professional environment. Clark (1997) describes this process as “self-concept and identity formation” (p.8). Active and structured participation in self-discovery can assist students to reflect on their growing professional values and attitudes and to learn and refine skills that will allow them to successfully and confidently participate in a formidable work environment at the outset and throughout stages of their career. The confidence that accompanies affirmation of the value of professional strengths has the potential to enhance and reinforce students’ sense of self-efficacy related to their academic and professional career choices.

The purposes of this article are twofold: to convince academics to participate in formal career planning and development activities with their students, and to report on research about a student-focused career planning and development intervention program for student nurses.

**Student Career Planning and Development Needs**

Students’ career planning needs have long been neglected in nursing education curriculum development.

Consequently, students embark on their nursing careers with little knowledge of how they might position themselves to take advantage of the opportunities available to them (Marsland, 1995). Marsland emphasized that for nursing students to achieve their maximum potential, they need expert assistance in their efforts to make career decisions. Yet currently, career planning and development activities are concentrated in the final months before graduation and usually focus on how to prepare for getting a first job (e.g., interviewing skills, resume writing) rather than on developing the skills and perspective necessary to comprehensively plan throughout all the stages of one’s career.

Little is understood about how students, particularly those in undergraduate nursing programs, can participate in their nursing education in a way that will prepare them to assume responsibility for their academic and career paths. Nursing education programs have been criticized for continuing to focus on clinical skill development without guiding students in how to develop the career planning skills necessary to optimize those clinical skills within the health care delivery system (Donner, 1993).

The existing literature further suggests that nursing faculties and curricula lack the dedicated expertise, time, and content necessary to adequately prepare students for career success in the current health care environment. Crofts (1992) studied the career guidance needs and experiences of second- and third-year nursing students from four colleges of nursing. Of the 90 students who responded to Crofts’ questionnaire, less than 50% indicated that they had discussed their career plans...
with someone, and only 12% had been offered any career advice. Students identified nursing faculty as resources whom they would be most likely to approach for career advice. However, the majority of faculty members who responded to the questionnaire indicated that they had never received career guidance and did not feel confident to provide it to students.

Marsland (1995) conducted a survey focused on career guidance offered to students and guidance that students claimed to desire but did not receive. Interview data indicated that new graduates felt that they received little career guidance over the course of their nursing education, which left them with a sense of being ill-prepared to establish themselves in their chosen career. Students expressed concerns related to their ability to develop a career path or execute their career goals in a challenging health care system. Marsland’s results indicated that the majority of students wanted, and on ad hoc basis received, some help with how to obtain a nursing job. Fewer received guidance about how they might gain experience related to their future career goals. Students also indicated that they wanted information and guidance in the area of career planning.

Nursing education programs have a responsibility to prepare students to create meaningful careers with confidence and enthusiasm. Fowler Byers and Bellack (2001) maintained that for nursing education programs to remain responsive to a changing health care system, curricular content and educational processes must include innovative strategies designed to enhance nursing students’ performance and the development of their professionalism. Secrest, Norwood and Keatley (2003) suggest that the inclusion of reflection on professionalism in nursing curricula is equally important to the knowledge and skills also included. It is through their education experiences that nursing students form their professional identities, examine their values and learn the norms of professional practice (Clark, 1997).

Socialization into the profession is an interactive process whereby professional identities are founded on values, meanings and norms that students adopt throughout their educational programs (Clark, 1997; Thorpe & Loo, 2003). The formation of professional identity is a developmental process (Clark, 1997). Individuals come to know themselves within their profession by reflecting on experiences, finding meaning in these experiences and incorporating this meaning into their professional being (Smith, 1992). The discovery of professional meaning can be fostered through the integration of career planning and development education and skill development throughout nursing curricula. Nursing education programs are in a prime position to initiate and sustain students’ career planning and development skills. The academic environment offers unlimited opportunities for professional role modeling of attributes related to career resilience. Establishing career planning and development as a priority in nursing education can serve to ensure that students are both socialized, and offered the tools and resources to achieve, professional success throughout their nursing career.

**Student Career Planning and Development Study**

A pilot study examining the effectiveness of a career planning and development program that used a modified version of Donner and Wheeler’s career planning model (Donner, 1998, see Table 1) was conducted at an urban Canadian university. The overall goal of the two-phased randomized control study was to examine the impact of a student-focused career planning and development program on the student nurse outcomes of involvement in career planning activities and perceived confidence related to career decision making. Study objectives included assessing (a) within and between group differences in career decision-making self-efficacy following the introduction, and participation in, a student-focused career planning and development program; (b) within and between group differences in the degree to which students were engaged in career planning and development activities; and (c) student nurses’ perceptions of the role that career planning and development would play both during their academic nursing program and in their future professional nursing practice.

**Methodology**

A randomized control study design with a focus group component was utilized to examine quantitative and qualitative differences between and within intervention and control groups in terms of career decision-making efficacy and career planning activities. The research study was approved by the university ethics review board at the study site.

**Data Collection**

**Sample**

Randomly selected students from the second and third years of a basic baccalaureate nursing program located in an urban university were invited to participate in the career planning and development study. The self-selected participants from the initial randomized group were then randomly assigned to control or intervention groups. The study sample ranged in age between 20 and 40 years. The highest level of education achieved before entering the nursing program ranged from high school to second year of university preparation. The majority of participants reported that they had little, or no, experience using a career planning and development model.

**Study Instruments**

The quantitative data collection questionnaire included the Career Planning Activities Measure and the Career Decision-Making Self-Efficacy Scale–short form (CDMSES). Wheeler, Waddell, Donner and McGillis Hall developed the Career Planning Activities Measure in 2001. It is a measure of the activities that each participant has undertaken related to career planning as outlined in the four stages of the Donner and Wheeler’s (Donner, 1998) model: scanning, assessing, visioning, and planning. A summative score is created for each participant within each of the four stages of the model. A high score indicates a higher degree of CPDP career planning activities. The Career Planning Activities Measure has been used in two previous studies of career planning and development with nurses with reported Cronbach alphas of .62–.94 with community health nurses and .66–.92 with
registered nurses in an acute care setting. Cronbach’s alpha was .69-.81 in this study.

The Career Decision-Making Self-Efficacy Scale (Taylor & Betz, 1983) measures students’ perceived level of confidence related to career decision making. It contains six dimensions on a 10-point scale where participants are asked to indicate their perceived confidence in accomplishing different tasks necessary to make quality career decisions. Cronbach’s alpha has been reported as .97 (Taylor & Betz), and .80 in this study.

The researchers developed a demographic data sheet that obtained data related to selected demographic characteristics such as work-related information, educational preparation, and involvement in career development activities.

**Phase One**

In Phase One of the study during the fall of the 1999/2000 academic year, the intervention group included 14 students, 6 in the second and 8 in the third year of their nursing program. Thirteen of these students were female and one was male. In a three-hour workshop, the intervention group was introduced to Donner and Wheeler’s (Donner, 1998) career planning and development model, which was adapted for use with nursing students. Due to conflicting academic and clinical practice demands, the intervention workshops were run on two separate occasions, with the participants choosing the one that best fit their schedule. The intervention group completed the study questionnaire before beginning the workshop and within 2 weeks of completing it. Each participant received a career planning and development book in addition to a student career planning and development workbook folder.

The control group consisted of 11 students, 5 in the second year of the program and 6 in the third year. Control group members did not participate in the career planning and development workshops. They completed the study questionnaire on an individual basis within the same time period as the intervention group. Control group members were informed that they would be offered a comprehensive career planning and development workshop at the completion of Phase Two of the study, scheduled for March, 2001.

At that time, control group participants also received a career planning and development book with a student career planning and development workbook folder.

**Phase Two**

All participants in Phase One were invited to continue their involvement in Phase Two, with the understanding that participants would remain in the group (intervention/control) to which they were originally randomly assigned. Of the 25 original participants, 5 students dropped out of the study citing academic and family life demands. The remaining 20 participants (10 in each group) requested to continue their study involvement for the 2000/2001 academic year. Both the intervention and control groups contained 4 third-year students and 6 fourth-year students.

The Phase Two intervention included two 3-hour working sessions in which the career planning and development model introduced in Phase One was explored in further depth and applied to the intervention group’s current academic setting and professional experiences. Although individual career coaching was also offered to the intervention group members, none of them requested it during the course of the study. After the end of the project and the academic term, however, 5 of the 10 (3 third-year and 2 fourth-year students) intervention group participants asked for, and received, individual coaching.

The instruments used in Phase Two were administered to all study participants immediately before the Phase Two intervention workshops and up to one month after. All students in the intervention group completed an evaluation form assessing their perceptions of the career planning and development program following the workshops in both phases of the study.

**Focus Groups**

All control and intervention group members were invited to participate in a focus group as a means of validating the quantitative study findings and further discovering and understanding the students’ personal perception of, and experience with, the career planning and development process. Focus group participants were paid a $35.00 honorarium. Separate focus groups were conducted for the intervention and control groups. Four students from the intervention group and three from the control group participated in the focus group discussions. They were moderated by the project research assistant, lasted for 1 1/2 hours, and were tape-recorded. Participants in both intervention and control groups were asked the following questions:

1. What does career planning and development mean to you?
2. How would you describe your experience with career planning and development?
3. How and where do you think career planning and development fits with your nursing education?
4. Where do you see career planning and development fitting with your professional nursing practice?

**Data Analysis**

Participant questionnaire responses yielded numerical data that were coded and entered into a statistical software program, SPSS, for analysis. All Phase One and Two participants completed and returned their questionnaires. T-tests were used to determine between and within group differences between the intervention and control groups on questionnaire items.

All focus group discussions were audio taped and each audio-tape was transcribed by the project research assistant. The qualitative approach to the focus groups and related data analysis was phenomenology. LoBiondo-Wood and Haber’s (1998) steps of data analysis were followed to arrive at the final synthesis of the participants’ lived experience. The audio-tapes were reviewed twice to ensure transcription accuracy. Using the guiding questions posed in the focus groups, the research assistant then comprehensively read and analyzed the transcripts to determine and categorize major themes. Significant phrases were identified and the central meaning of participants’ responses was paraphrased as a theme. A theme was identified if it was discussed by a majority of the focus group.
participants. The principal investigator followed the initial review and identification of themes with a blind review, which yielded a final synthesis congruent with that of the research assistant. Themes were grouped under the focus group questions to determine how the data answered the question and to categorize the pertinent findings for both the intervention and control groups.

**Results**

**Questionnaire Data**

**Between Group Differences**

No significant differences in career planning activities and career decision-making were found between the control and intervention groups before the career planning and development program intervention was introduced. After Phase One, the intervention group, compared to the control group, had significantly higher scores on both the Career Planning Activities Measure and CDMSES (see Table 2). The only area in which there was not a significant group difference was on the self-assessment scale of the Career Planning Activities Measure. This scale measures the degree to which individuals engage in assessment of their personal and professional strengths and limitations, an exercise common to clinical course requirements in all years of the basic baccalaureate program at the institution in which the study was conducted.

In contrast, the only significant between group difference that emerged post-intervention in Phase Two was found in the strategic career planning scale of the Career Activities Measure (see Table 3). This scale measures the extent to which individuals have a documented and specific career plan for the next 6 months.

**Within Group Differences**

The intervention group had significant increases in the degree of career planning activity and the level of career decision-making self-efficacy from pre- to post-test in both phases of the study (see Table 4 and 5). In contrast, the control group’s scores in career planning activity scores did not change significantly from pre- to post-questionnaire in Phase One. However, their scores did increase on the self-efficacy scale on the post-test in Phase One. In the study’s second phase, there were no significant changes between the control group pre- and post-test scores in either career planning activities or career decision-making self-efficacy.

**Summary**

Compared to the control group, students who participated in a student-focused career planning and development program achieved significantly higher scores on both career-planning activities and career decision-making self-efficacy measures in the second and third years of their nursing program. After participating in Phase Two of the study during the third and fourth years of their nursing program, these same students did not score significantly higher than the control group on either measure, with the exception of active career planning. In terms of within group differences, the intervention group had significantly higher career activity and self-efficacy scores following participation in the career planning and development program in both phases of the study, whereas post-intervention in Phase Two, the control group did not maintain the significant increase in self-efficacy score they achieved in Phase One.

**Focus Group Data**

Both intervention and control group participant responses to the four questions guiding the focus groups were reviewed and analyzed for common themes. The four main categories of themes derived from the data were:

1) The Meaning of Career Planning and Development

**Control Group**

Employment/health care system drives career planning and development

[Career planning means] starting from graduation, planning from your first job, finding out what you like early and using your jobs to get your goals.

It [career planning] is focusing on different types of careers in nursing, different types of nursing.

[Career planning is] looking at the trends in a particular field and seeing where you fit.

**Intervention Group**

Individual values drive career planning and development

It’s [career planning] taking your values and using them to formulate a plan that you can use, step-by-step.

Assuming control of one’s career

It’s [career planning] taking ownership of your career, your future, and making it what you want it to be, rather than feeling adrift.

2) Experience With Career Planning and Development

**Control Group**

Searching

I’ve gone to job fairs in my 4th year, more career searching and job searching.

I had different kinds of testing at a career centre where they had different types of tests that were quite extensive and they asked you questions about your preferences and those kinds of things.

CNSA conferences, just talking with people that may help me focus.

**Intervention Group**

Empowerment

This is the first time in my program that I have someone really talk to me about what I want, what is important to me, and where I see myself going. I feel empowered to take charge of my career. I feel stronger about standing up for myself and for what I want to do.
3) The Fit Between Career Planning and Development into Nursing Curricula

Control Group

Lack of career planning and development information and support
We need more focus on different nursing careers – beginning in first year we could have workshops and seminars on different types of nursing so that people could get a feel for some other types of nursing so maybe, by fourth year they would make different choices as far as clinical placements.

There should be faculty who are dedicated to career planning, otherwise it really depends on what your exposure is, you might know a lot of people, or you might lose out on a perfect resource person.

You kind of need an expert, someone who is interested in helping you who is also an expert in the area, it can’t be just anyone.

Career planning needs to be lead by someone who knows what they are doing, and not just by reading off of a sheet, or giving advice based on their experiences.

Intervention Group

Need for early and ongoing inclusion of career planning and development into nursing curricula
Career planning needs to be part of our education process right from the get go. You need a consciousness of where each experience is taking you, or you flounder, in the early years you don’t have a sense of where your path is leading you, you flounder.

As my values and goals continuously change throughout the nursing program, career planning and development should be included in all levels of the program.

4) Fit Between Career Planning and Development and Professional Practice

Control Group

Uncertainty
I am going into left field until I find out what I really want to do, and that may be a few years. I don’t know, maybe I can get my plan together and then I’ll be on my way, prior to that I’ll still be searching I guess.

I really do not have a plan. I want to learn more as to how actually to make a plan and to see where I am going ‘cause you know that is one of the things I’m a little perturbed about ‘cause in order to get anywhere you need to make a plan. I feel like I am going in circles, I feel like there are many things that I am interested in but where am I going?

Intervention Group

Personal control and direction
It will help me to just keep opening doors and not getting stuck anywhere – constantly looking ahead and beyond of what is directly in front of me – I am more goal directed.

It helps you to turn things around…you see how the learning fits for me not others.

Discussion
This pilot study examined the effect of a career planning and development program on student nurse outcomes. Given the small number of participants in the pilot project, and the single study site, results cannot be generalized beyond the pilot sample, however, findings do provide insights and directions for further research and curriculum development.

Findings suggest that students who participated in an introductory student-focused career planning and development program in the earlier years of their nursing baccalaureate education (early fall of their second and third years) were significantly more active in the process of career planning and development, and reported greater confidence in their ability to make career-related decisions than those who did not participate in such a program at that stage of their nursing education. These initial findings lend support to the contention that introducing a career planning and development program early within nursing academic programs can provide students with needed tools and guidance so that they may confidently assume responsibility for relevant and timely career-related initiatives.

Participation in a career planning and development process offered study participants a structured and continuous process through which they could reflect on their evolving professional self and identify what they need to progress toward their vision of the nurse they wish to be.

The lack of between group differences following Phase Two of the study, when participants were in the late fall of the third and fourth year of their academic program, was initially somewhat puzzling. Since the intervention students were much more intensely involved in all phases of the career planning and development program in Phase Two, it was expected that the significant differences found following the first phase would be maintained after the second. But when the context of the students’ academic experience at the time of Phase Two was examined, it became apparent that some activities and events may have contributed to the non-significant between group findings after the second phase. Sixty percent of both intervention and control group participants were in the final year of their baccalaureate nursing education.

In the fall of the fourth year, a plethora of job fairs are held both within the School of Nursing at the institution in which the study was conducted and external to the academic setting. Moreover, the fourth year students are given clinical credit for attending a fall provincial job fair sponsored by the nursing professional organization.

Resume and interviewing workshops are also offered at this time of year for
third and fourth year students. In addition, fourth-year students are required to take a “Nursing Issues and Trends” course in the fall term that focuses on enhancing the senior nursing students’ awareness of the health care system and involvement in professional activities. Overall, there is a strong focus on preparing to graduate within the academic, clinical, and broader professional arenas.

Of interest, the intervention group demonstrated consistent increases in career planning activities and confidence in career decision-making self-efficacy over both Phase One and Phase Two of the study. But the control group’s career decision-making self-efficacy score increased only following the first phase, with no significant change in scores in Phase Two. It may be that, given the flurry of events in the fall related to graduation, the control group members participated more actively in some career-related activities. However, they did not maintain this level of active involvement once they secured a job.

Self-selection into the study, the effects of study participation, and student maturity over the course of the study are also factors to take into account when interpreting the findings. A further consideration is the students’ differing perspectives on the nature of career planning. The focus group discussions broadly suggested that students who had not participated in a career planning and development program perceived career planning as those activities necessary to secure a job at graduation (i.e., attending job fairs, exploring the different types of available nursing roles, and determining what employment options their current skill level would permit). At the time of this study, such activities were abundant and easily accessible. Moreover, the students in this study were entering the nursing workforce at a time of shortage and were, in most cases, confident that they would have a job after they graduated. Yet in spite of this security, control group discussion participants expressed the theme of “feeling adrift” regarding their professional future, and of needing direction and assistance in formulating a plan for their career.

The nature of support offered to graduating students by the School of Nursing appeared to convey a valuing of the “doing of nursing” through the achievement of employment. Donner and Wheeler (2004) suggest that a career in nursing is “about being a nurse, not doing nursing” (p.29). The distinction lies in the belief that being a nurse is imbedded in who we are as individuals and the values, beliefs, interests and knowledge that we hold in both our professional and personal lives whereas the doing of nursing focuses on the work to be accomplished (Donner & Wheeler, 2004).

In contrast to the focus on searching for and obtaining a job, those in the intervention group discussion seemed to place a broader emphasis on the relevance of values in guiding both short- and long-term career choices. They also expressed a sense of empowerment from having a process to use for career planning, as well as a sense of confidence in their ability to plan and control their career over time. The cornerstone of the career planning and development process is the discovery of self within the context of nursing. Smith (1992) defines this knowing in nursing as a “holistic and integrative process of making sense out of ourselves in the world...it is weaving the threads of conceptions, perceptions, remembrances and reflections into a fabric of meaning” (p.1). Secrest, Norwood and Keatley (2003) propose that knowing in nursing enhances students’ confidence, competence and sense of professional worth. Structured curricular activities that incorporate reflection on professionalism may serve to socialize students to value both the achievement of professional knowledge and skills and the creation of a meaningful nursing career.

Both groups identified the need to have dedicated, expert career planning and development resources formally integrated into the nursing education curriculum, beginning in the early years of the program. The nature of the need for support differed between the control and intervention groups. Control group participants expressed a desire to have information presented to them with respect to nursing careers and experts who could help them with their career. Participants in the intervention group spoke to the need for a process to be introduced into their education experience that would enable them to reflect on, and respond to their expanding experiences and their changing values and goals. Although both groups highlighted a need for greater support related to career planning and development, it would seem that the control group sought direction from those who were perceived as authorities whereas intervention group participants needed a structure though which they could assimilate new experiences into their career planning and development.

Conclusion

Lack of education about the process of career planning and development during baccalaureate nursing education was an issue for the student participants in this pilot study. Study findings suggest that providing formal guidance in this process makes a difference in the degree to which students confidently participate in goal-directed career planning activities. Educational initiatives targeted to students’ individual and collective career planning and development needs can convey a valuing of the importance of the self within one’s career and help them to assume responsibility for their nursing career throughout the course of their academic program and their nursing career (Donner & Wheeler, 2000). Education programs have a responsibility to prepare students to capitalize on change and create their careers with assurance and enthusiasm. Integrating career planning and development education throughout academic program curricula may be one means of ensuring that students are offered the tools and resources to be active and confident in their ability to achieve professional success in rapidly changing employment environments rife with opportunities rather than certainties. The ability to be career resilient within one’s academic and professional career has the potential to build capacity within the profession (Donner & Wheeler, 2004).

The results of this pilot study provide educators with direction for future research. Intervention and longitudinal research with students across years of nursing curricula and academic settings
would provide further information about students’ needs and how the career planning and development process contributes to their perceived professional success and career satisfaction.

References


Table 1

*Career Planning and Development Model* (Donner, 1998)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description of phases and process</th>
</tr>
</thead>
</table>
| Scanning your environment           | - Foundation of career-planning process  
  - Activity to become better informed and see the world through differing perspectives  
  - Taking stock of the world in which you live  
  - Understanding current realities in your country, health care system, and work environment as well as future trends at global, national, and local levels within and outside of health care and the nursing profession. |
| Self-assessment and reality check    | - Identifying your values, experiences knowledge, strengths and limitations  
  - Key to exploring new opportunities  
  - Together with environmental scan helps you to identify future directions  
  - Reality check allows you to seek validation of your self-assessment and expand your view of yourself.                                                                 |
| Creating your career vision         | - Exploring possibilities guided by your environmental scan and self-assessment  
  - Vision of your potential future  
  - Focus on what is possible and realistic for you in both the short- and long-term  
  - Link between who you are and who you can become.                                                                                                                                                      |
| Strategic career plan               | - Formulating a blueprint for action  
  - Specifying the activities, timespan and resources you need to help you achieve your goals and career vision.                                                                                                                  |
### Table 2

**Phase One Post-Test Between Group Differences on Career Planning Activities Measure and Career Decision Making Self-Efficacy Scale**

<table>
<thead>
<tr>
<th>Scales</th>
<th>Means</th>
<th>t</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Int.</td>
<td>Control</td>
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<tr>
<td>Scanning the environment</td>
<td>40.8</td>
<td>34.6</td>
<td>2.25</td>
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<tr>
<td>Self-assessment</td>
<td>29.8</td>
<td>28.1</td>
<td>1.16</td>
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<td>Career vision</td>
<td>42.1</td>
<td>34.5</td>
<td>2.83</td>
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<td>Strategic career planning</td>
<td>7.1</td>
<td>5.4</td>
<td>2.50</td>
</tr>
<tr>
<td>Career decision-making self-efficacy</td>
<td>105.2</td>
<td>89.5</td>
<td>2.86</td>
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*p<.05. **p<.01.

### Table 3

**Phase Two Post-Test Between Group Differences on Career Planning Activities Measure and Career Decision-Making Self-Efficacy Scale**

<table>
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<th>Scales</th>
<th>Means</th>
<th>t</th>
<th>p</th>
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</thead>
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<td></td>
<td>Int.</td>
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<tr>
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<td>31.4</td>
<td>.988</td>
</tr>
<tr>
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<td>44.3</td>
<td>41.1</td>
<td>1.19</td>
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<td>8.3</td>
<td>6.8</td>
<td>3.05</td>
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<td>Career decision-making self-efficacy</td>
<td>112.0</td>
<td>110.4</td>
<td>.193</td>
</tr>
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</table>

**p<.01

**p<.01
Table 4

Phase One Pre-Post Test Within Group Differences on Career Planning Activities Measure and Career Decision-Making Self-Efficacy Scale

<table>
<thead>
<tr>
<th>Scales</th>
<th>Intervention Group</th>
<th>Control Group</th>
<th>t</th>
<th>p</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
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<td>Scanning the environment</td>
<td>37.4-40.8</td>
<td>32.8-34.6</td>
<td>3.30</td>
<td>.008**</td>
<td>1.85</td>
<td>.087</td>
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<tr>
<td>Career vision</td>
<td>37.0-42.2</td>
<td>31.4-34.5</td>
<td>2.31</td>
<td>.04*</td>
<td>1.19</td>
<td>.068</td>
</tr>
<tr>
<td>Strategic career planning</td>
<td>5.4-7.1</td>
<td>1.95</td>
<td>3.01</td>
<td>.01**</td>
<td>5.4-6.8</td>
<td>.073</td>
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<tr>
<td>Career decision-making self-efficacy</td>
<td>87.4-105.8</td>
<td>82.8-89.5</td>
<td>4.09</td>
<td>.002**</td>
<td>2.83</td>
<td>.014**</td>
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</tbody>
</table>

*p<.05. **p<.01.

Table 5

Phase Two Pre-Post Test Within Group Differences on Career Planning Activities Measure and Career Decision-Making Self-Efficacy Scale

<table>
<thead>
<tr>
<th>Scales</th>
<th>Intervention Group</th>
<th>Control Group</th>
<th>t</th>
<th>p</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scanning the environment</td>
<td>42.6-44.1</td>
<td>40.9-43.4</td>
<td>1.53</td>
<td>.160</td>
<td>1.790</td>
<td>.106</td>
</tr>
<tr>
<td>Self-assessment</td>
<td>29.4-32.6</td>
<td>30.8-31.4</td>
<td>3.73</td>
<td>.005**</td>
<td>0.620</td>
<td>.551</td>
</tr>
<tr>
<td>Career vision</td>
<td>40.2-44.3</td>
<td>38.4-41.1</td>
<td>2.51</td>
<td>.034*</td>
<td>1.620</td>
<td>.140</td>
</tr>
<tr>
<td>Strategic career planning</td>
<td>6.9-8.3</td>
<td>6.3-6.8</td>
<td>2.26</td>
<td>.050*</td>
<td>1.340</td>
<td>.213</td>
</tr>
<tr>
<td>Career decision-making self-efficacy</td>
<td>99.7-112</td>
<td>95.9-110.4</td>
<td>3.02</td>
<td>.015*</td>
<td>0.149</td>
<td>.170</td>
</tr>
</tbody>
</table>

*p<.05. **p<.01.
By Dr Catherine Armstrong. Many of the articles on this website are concerned with getting your first academic job or the transition from student to member of staff. But it's important to remember that career development does not end there. If you have got a permanent position you need to work out where you see yourself in the longer term and making training and strategic provisions to ensure you get there. I recently covered this issue in a blog entry too: It’s official, I’m no longer a probationer! Below are some points to consider when making your long-term career plan and how to maxim a Professional Development Plan is a roadmap containing the skills, strategy, and education you need to further yourself in career and life to achieve your professional goals. Professional development is traditionally associated with careers in which it’s compulsory, like teaching, but it’s something that everyone can (and should) be utilizing in their lives! When you look at the highest achievers in history – the Elon Musks, the Jeff Bezos, Teslas, Franklins, Twains, DaVincis and every Olympic athlete they all achieved their professional development through discipline, education, and plan...